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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/934,775	08/21/2001	Clifford Curry	1938-2	8595

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GRAYBEAL, JACKSON, HALEY LLP  
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SUITE 350  
BELLEVUE, WA 98004-5901

EXAMINER

COX, CASSANDRA F

ART UNIT	PAPER NUMBER
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2816

DATE MAILED: 11/06/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/934,775

Applicant(s)

CURRY ET AL.

Examiner

Cassandra Cox

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 11 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 3-21 is/are allowed.
- 6) ☒ Claim(s) 1 is/are rejected.
- 7) ☒ Claim(s) 2 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☒ The proposed drawing correction filed on 21 August 2001 is: a) ☒ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

1. Applicant's arguments with respect to claims 1-2, 7-9, 16, and 19 have been considered but are moot in view of the new ground(s) of rejection.

#### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by Callway (U.S. Patent No. 6,424,320).

In reference to claim 1, Callway discloses in Figure 1 a circuit comprising: an actual switch (141, 143) coupled to an actual output node (RGB OUT2, RGB OUT1) and operable to receive an input signal sequence (PORT2 SELECT, PORT1 SELECT) that indicates a set of transitions associated with the actual switch (141, 143); a dummy switch (142) coupled to a dummy output node (R) and operable to receive a dummy signal sequence (DUMMY PORT SELECT) that indicates a set of state transitions associated with the dummy switch (142), the dummy signal sequence indicating state transitions that are mutually exclusive of state transitions indicated by the input signal sequence (see column 4, lines 40-50).

***Allowable Subject Matter***

4. Claims 3-21 are allowed.
5. Claim 2 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
6. The following is a statement of reasons for the indication of allowable subject matter: Claim 2 would be allowable because the closest prior art of record fails to disclose a circuit as shown in Figure 3 wherein the activation unit (210) has an input coupled to receive the input signal sequence ( $D_a$  and its complement) in combination with the rest of the limitations of the base claims and any intervening claims.
7. The following is an examiner's statement of reasons for allowance: Claims 3, 10, and 12 are allowed because the closest prior art of record fails to disclose a circuit as shown in Figure 3 wherein the activation unit (210) is coupled to receive a next state ( $S$ ,  $/S$ ) of the actual switch, a present state ( $D_a$ ,  $/D_a$ ) of the actual switch, and a present state ( $D_d$ ,  $/D_d$ ) of the dummy switch, and is coupled to provide the dummy signal ( $D_d$ ,  $/D_d$ ) to the dummy switch in combination with the rest of the limitations of the base claims and any intervening claims. Claim 4 is allowed because the closest prior art of record fails to disclose a circuit as shown in Figure 2 further comprising a first current source (180) coupled to the actual switch and a second current source (190) coupled to the dummy switch, wherein the second current source (190) provides a different amount of current than the first current source (180) in combination with the rest of the limitations of the base claims and any intervening claims. Claims 5, 14, and 18 are

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allowed because the closest prior art of record fails to disclose a circuit as shown in Figure 2 comprising a first current source (180) coupled to the actual switch and a second current source (190) coupled to the dummy switch, wherein the second current source (190) provides less current than the first current source (180) in combination with the rest of the limitations of the base claims and any intervening claims. Claims 6 and 15 are allowed because the closest prior art of record fails to disclose a circuit as shown in Figure 4 wherein the actual switch and the dummy switch form a portion (200) of a digital to analog converter (300) in combination with the rest of the limitations of the base claims and any intervening claims. Claims 7-9, 16, and 19 are allowed because the closest prior art of record fails to disclose a circuit as shown in Figure 1 wherein the circuit includes a plurality of dummy switches (150) in combination with the rest of the limitations of the base claims and any intervening claims. Claim 11 is allowed because the closest prior art of record fails to disclose a circuit as shown in Figure 1 having an activation unit (210) corresponding to each dummy switch (150) in combination with the rest of the limitations of the base claims and any intervening claims. Claims 13 and 17 are allowed because the closest prior art of record fails to disclose a circuit as shown in Figure 2 wherein a first current source (180) is coupled to an actual switch within the plurality of actual switches; and a second current source (190) is coupled to a dummy switch within the plurality of dummy switches in combination with the rest of the limitations of the base claims and any intervening claims. Claims 20 and 21 are allowed because the closest prior art of record fails to disclose a method as disclosed in the specification page 3, lines 7-15 wherein the method comprises the steps of determining

whether an actual switch will change state during a next switching cycle; and changing a state of a dummy switch during the next switching cycle in the event that the state of the actual switch will remain unchanged during the next switching cycle in combination with the rest of the limitations of the base claim and any intervening claims.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

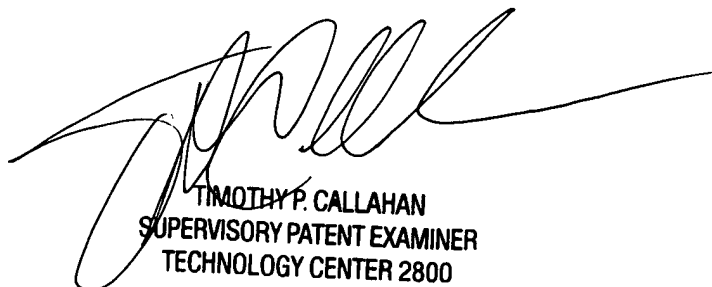
### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cassandra Cox whose telephone number is 703-306-5735. The examiner can normally be reached on Monday-Thursday from 8:00 AM to 5:30 PM and on alternate Fridays from 8:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Callahan can be reached on (703)-308-4876. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

CC  
ce  
November 3, 2003

  
TIMOTHY P. CALLAHAN  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2800